UNITED STATES PATENT OFFICE.

JAMES WORMLEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

LIFE-SAVING APPARATUS.

SPECIFICATION forming part of Letters Patent No. 242,091, dated May 24, 1881.

Application filed March 11, 1881. (No model.)

To all whom it may concern:

Be it known that I, JAMES WORMLEY, of Washington, District of Columbia, have invented an Improvement in Life-Saving Apparatus for Ships, of which the following is a specification.

The invention consists in a float or a number of floats attached to the free end of a rope, which at that end has one or more eyes and runs out as the ship moves through the water, in combination with a lock and cast-off mechanism consisting, essentially, of a sliding rod at the ship's side, provided with projecting arms, which, in their normal position, are passed through each an eye in the rope, but which disengage therefrom by a movement of the sliding rod which is controlled, through suitable intervening mechanism, by a hand-lever near the ship's wheel.

For the greater efficiency of the apparatus it is duplicated, that a string of floats may be detached from either or both sides of the vessel.

In the drawings, Figure 1 is an upper-deck plan of a propeller embodying my invention. Fig. 2 is a side elevation of such propeller. Fig. 3 is a sectional elevation on line $x\ x$ of Fig. 1. Fig. 4 is a sectional elevation on line $x'\ x'$ of Fig. 3. Fig. 5 is a cross-section on line $x^2\ x^2$ of Fig. 3.

A is the ship's hull, B the bulwarks, C the upper deck, and D the wheel. E E, two vertical drums.

F F, &c., are floats attached, as shown, to the ropes *a a*, spliced portions of which, furnished with eyes *b*, pass through holes *c* in the ship's bulwarks.

R R are wire rods on the inner side of the bulwarks, along either side of the ship, and having a longitudinal sliding motion in eyebolts *d*. Near each hole *c* they are provided with bent projecting arms or hooks *l*, of smaller wire, the free ends of which pass through smaller eyebolts *m*, and also through the eyes *b* of the ropes *a*. The length of each hook *l* is such that when the arm, partaking of the motion of its rod R, is drawn back it slips from its eye *b* in the rope.

S is a fixed shaft below the upper deck, near the stern of the vessel, as shown. At either end it has a sleeve, *s*, an arm, *w*, projecting from which, through the deck near the bulwarks, is connected by a link, *t*, with one of the rods R, while a hand-lever, L, also rigidly connected with the sleeve, projects through the deck near the wheel, as shown, or at some place where a watch is constantly required.

I claim—

In a life-saving apparatus, the combination, with the floats F, having their rope *a* twisted and passed into sleeves or tubes *c* in the sides or bulwarks of the vessel, of the sliding rods R, adapted to be connected to mechanism for giving them their sliding motion, and having elbow-arms *l* supported in eyes or brackets *m*, and passed through the loops of the twisted and sleeved portions of the rope *a*, substantially as and for the purpose set forth.

JAMES WORMLEY.

Witnesses:
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